

120 Ω Lightweight CANbus Terminator

INTRODUCTION

Carlisle Interconnect Technologies (CarlisleIT) CANbus Terminators terminate high-speed controller Area Network buses. These lightweight terminators are specifically engineered for the challenges of aerospace such as:

- » Damp Environments
- » Harsh Chemical Exposure
- » High Vibration

The extruded outer jacket strips easily, simplifying termination while the small diameters and short cap lengths simplify harness routing through tight spaces on the aircraft.



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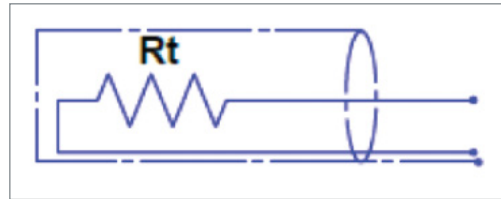
FEATURES	BENEFITS
Terminator size: 2.250" length x 0.425" diameter	<ul style="list-style-type: none"> • Small terminators facilitate harness installation on the aircraft
High-strength copper alloy, silver-plated, twisted pair conductor strands with shielded construction	<ul style="list-style-type: none"> • Quality materials for reliable data transmission
Extruded enhanced fluoropolymer insulation	<ul style="list-style-type: none"> • Eases termination to databus network over tape-wrapped jackets while providing abrasion protection
Designed to withstand damp environments, harsh chemicals, and high vibration. Operating temperatures range from -65 °C to 150 °C	<ul style="list-style-type: none"> • Optimized for aerospace use
Standard product is available in #22, #24, and #26 AWG, 121 Ω. <i>Custom product available upon request</i>	<ul style="list-style-type: none"> • Standard configurations for speedy adoption • Options available to facilitate a variety of databus applications
Constructed of fungus-resistant materials	<ul style="list-style-type: none"> • Terminators do not aide in the growth of common fungi and are suitable for installation in damp environments
RoHS compliant	<ul style="list-style-type: none"> • Complies with regulations

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OPERATIONAL PERFORMANCE

Parameter	Specification
Operating temperatures	-65 °C to 150 °C per EIA 364-32, test condition IV
Resistance to common aerospace chemicals including:	Fuel Jet A, ASTM D1655
	Isopropyl Alcohol, TT-I-735
	Methyl Propyl Ketone, BMS11-9, Grade 1
	Potassium Formate (Aviform)
	Propylene Glycol (Dowfrost)
	DMS3-11 Type IV, Class 1 Hydraulic Fluid, Fire Resistant (Skydrol)
	Hydraulic Fluid, MIL-PRF-5606
	Hydraulic Fluid, MIL-PRF-87257
	Lubricating Oil, MIL-PRF-23699
Random vibration	Frequency range 10 to 2,000 Hz, RMS Level 15.3 GRMS, 5 hours per axis (X and Y), with no loss of electrical continuity (per EIA-364-28)
Mechanical shock	Half-sine, 490 m/s ² peak acceleration, 6 shocks per axis (X and Y), per EIA-364-27, Condition A
Altitude immersion	75,000 feet, per EIA-364-03
Smoke and toxicity	FAR 25.853 and Boeing/Airbus requirements

TERMINATOR SCHEMATIC

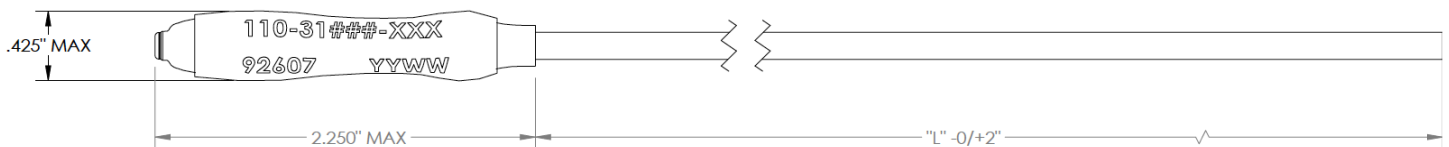


Rt = 121 Ω ± 1%, 1W



PART NUMBERING

Part Number*	Conductor	Shield	Terminator Weight	Assembly Weight**
110-31298-XXX	#22 AWG, silver-plated blue and white twisted pair copper, 120 Ω	Tin-plated round and flat copper braid	4.8 g	86 g
110-31299-XXX	#24 AWG, silver-plated blue and white twisted pair copper, 120 Ω	Tin-plated flat copper braid	3.6 g	46 g
110-31300-XXX	#26 AWG, silver-plated light violet and white twisted pair copper, 120 Ω	Tin-plated flat copper braid	3.4 g	34 g



* XXX in the part number denotes the length "L" of the assembly in inches, e.g. 110-31298-064 = #22AWG, 64"
 **Maximum weight of terminator assembly and 64" of cable



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CarlisleIT.com/products/connectors-accessories

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